## REMARKS

In view of the above amendments and following remarks, reconsideration of the rejections contained in the Office Action of December 22, 2003 is respectfully requested.

Initially, it is noted that a number of minor editorial changes have been made to the specification and abstract in order to generally improve the form of the application.

Furthermore, claims 12-37 have now been canceled. Thus, the rejections of claims 13-18 as set forth in section in section 2 on page 2 of the Office Action have been rendered moot. It is noted that language corresponding to that which was objected to by the Examiner has not been employed in the new claims.

New claims 52-72 are drawn to the elected invention and replace previous claims 12-37. The Examiner had rejected claims 12-37 as being clearly anticipated by James et al., U.S. Patent 6,069,080 (James). However, new claims 52-72 clearly patentably distinguish over James.

New independent claim 52 recites a method for manufacturing a fixed-abrasive polishing tool according to the present invention, including mixing abrading particles and a resin in a liquid, drying the mixed abrading particles and resin to obtain mixed powders, filling the mixed powders into a mold, and heating and pressing the mixed powders in the mold. The powders are heated and pressed, according to the claim, so as to control the porosity of the fixed-abrasive polishing tool in a certain range.

Similarly, independent claim 63 recites mixing abrading particles and a raw material of a resin in a liquid, polymerizing the resin during the mixing, drying the mixed abrading particles and polymerized resin to obtain mixed powders, filling the mixed powders into a mold, and heating and pressing the mixed powders in the mold so as to control the porosity of the fixed-abrasive polishing tool in a certain range.

The James patent cited by the Examiner begins discussion of a preferred method of fabricating particle clusters at the top of column 10, and begins a discussion of the fabrication of polishing articles containing particle clusters at line 57 of column 10. Thus according to James, particle clusters are made by mixing a aqueous dispersion of polishing articles with an aqueous dispersion of urethane prepolymer. The particle/particle binder mixture is then dried to remove the water, ground or milled

into a fine powder, each granule of which constitutes a particle cluster. The material is thus ground into particle clusters whose size is governed by the size of the polishing particles, the grinding method and the polishing application by which they are produced.

As can be seen from the discussion beginning at line 57, the particle clusters made in the above-described process are then incorporated into a polishing layer matrix by mixing the clusters into a flowable polishing layer matrix precursor and solidifying the matrix by curing, cooling or any other solidification operation. The manufacturing techniques can include molding, as noted at the bottom of column 10. As discussed beginning at line 31 of column 11, the mixture of particle clusters in the inter-cluster polymeric matrix is transferred to a mold. This mixture is allowed to gel and is then cured at elevated temperatures.

It will be appreciated that there are a number of differences between the present invention as reflected by independent claims 52 and 63 from that of James. For example, in claim 52, the abrading particles are mixed with a resin in a liquid, the mixed abrading particles and resin are dried to obtain mixed powders, and the mixed powders are filled into a mold. However, in James the "clusters" are mixed into a flowable polishing layer matrix precursor and then solidified by curing, cooling or other solidification operation. Powders are present in James during the fabrication process of particle clusters, but not, apparently, as part of the filling into a mold.

The same distinction is reflected by independent claim 63, which also recites filling mixed powders into a mold after the abrading particles and the raw material of the resin in a liquid had been mixed, polymerized and dried to obtain the mixed powders.

Furthermore, both independent claims 52 and 63 recite that the mixed powders are heated and pressed in the mold so as to control the porosity of the fixed-abrasive polishing tool in a certain range. While James does discuss elevated temperatures for curing of the mixture gel, James does not include heating and pressing the mixed powder so as to control porosity of the resulting tool. With the present invention, it is possible to more precisely control the porosity of the fixed-abrasive polishing tool to a certain range through the process of heating and pressing the mixed powder that is in the mold. It is noted that the porosity in the polishing tool works to form pockets for capturing foreign substances, free abrading particles and abrading solutions. The ratio of the porosity in the polishing

tool can control the rigidity or friability of the polishing tool in order to produce abrading characteristics of various performance.

Accordingly, from the above, it is respectfully submitted that James neither discloses nor suggests the invention of each claims 52 and 63. Indication of such is respectfully requested.

For the same reasons, it is respectfully submitted that dependent claims 53-62 and 64-72 distinguish over James. Further, there are additional limitations in these various dependent claims which further serve to distinguish over James. However, specific discussions of these differences does not appear necessary at this time in view of the clear distinction between independent claims 52 and 63 over James.

In view of the above amendments and remarks, it is submitted that the present application is now in condition for allowance, and the Examiner is requested to pass the case to issue. If the Examiner should have any comments or suggestions to help speed the prosecution of this application, the Examiner is requested to contact Applicants' undersigned representative.

Respectfully submitted,

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